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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/777,869 | DELORME ET AL. |
| | Examiner | Art Unit |
| | Paul Kim | 2161 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>03 July 2007</u>.

2a)☐ This action is **FINAL**.          2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-35</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-35</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date 11/4/67

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

1.      This Office action is responsive to the following communication:  Appeal Brief filed on 3 July

2007.

2.      Claims 1-35 are pending and present for examination.  Claims 1, 20, 24, 25 and 26 are

independent.

### *Response to Amendment*

3.      Applicant's request for reconsideration of the finality of the rejection of the last Office action is

persuasive and, therefore, the finality of that action is withdrawn.


### *Claim Rejections - 35 USC § 103*

4.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
> are such that the subject matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains.  Patentability shall not be
> negatived by the manner in which the invention was made.

5.      **Claims 1, 2, 7-9, 20-22, 24-26 and 28** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Dzienis (USPGPUB No. 2003/0037302, hereinafter referred to as DZIENIS), filed on 21

June 2002, and published on 20 February 2003, in view of Cooper (U.S. Patent No. 5,625,804,

hereinafter referred to as COOPER), filed on 17 April 1995, and issued on 29 April 1997.

6.      **As per independent claims 1 and 24, and dependent claim 22**, SEDLAR, in combination

with COOPER, discloses:

> A method for converting a filesystem from a first type to a second type, the method
> comprising the steps of:
>
> > generating a list of directories of the first type in the filesystem to convert {See
> > DZIENIS, [0040], wherein this reads over "an inventory is performed by scanning the directory
> > containing files to be converted"}; and

converting each directory in the list to the second type {See DZIENIS, [0042], wherein this reads over "[t]he file conversion is then performed on each file for every file that is supported"} while maintaining the file system in an active state {See COOPER, C2:L44-59, wherein this reads over "[t]he data conversion technique of the present invention advantageously enables data to be converted from one format to another while maintaining system operations"}.

The combination of the inventions disclosed in DZIENIS and COOPER would disclose a method wherein a list of directories to convert is generated (i.e. "the directory containing files to be converted"), and the directories therein are converted to a second type (i.e. is converted to another format). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS and COOPER.

One of ordinary skill in the art would have been motivated to do this modification so that the directory structure of filesystems may be updated accordingly or converted to another filesystem type.

7. **As per dependent claims 2 and 21**, DZIENIS, in combination with COOPER, discloses:

The method of claim 1, further comprising the step of:

sequentially initiating the steps of generating and converting upon initial program load of a computer system utilizing the filesystem {See COOPER, C1:L28-40, wherein this reads over "new versions of the software are loaded into the system along with change instructions providing information controlling the update"; and C7:L34-36, wherein this reads over "conversion begins for the rest of the data records to be converted. Initially, a variable N is initialized to the next record to be converted"}.

The combination of the inventions disclosed in DZIENIS and COOPER would disclose a method wherein the generation and conversion of the list of directories is initiated upon an initial program load of the computer system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS and COOPER.

One of ordinary skill in the art would have been motivated to do this modification in order to being the processes of generation and conversion.

8. **As per dependent claim 8**, DZIENIS, in combination with COOPER, discloses:

The method of claim 1, further comprising the step of:

marking a particular directory as being in the process of conversion once the particular directory is in the list {See COOPER, C6:L10-15, wherein this reads over "a further determination is made as to whether data record 1 has a status of converting . . . That is, are the data records specified by record 1 in the process of being converted?"}.

The combination of the inventions disclosed in DZIENIS and COOPER would disclose a method wherein the particular directory is marked as being in the process of conversion once the particular directory is in the list (i.e. retains the status of converting). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS and COOPER.

One of ordinary skill in the art would have been motivated to do this modification so that the user and the conversion process may be aware of the active process of conversion.

9.      **As per independent claims 20, 25 and 26**, DZIENIS, in combination with COOPER, discloses:

> A method for converting a filesystem from a first type to a second type, the method comprising the steps of:
>
>> executing a conversion process to convert each directory of the first type in the filesystem into the second type while maintaining the filesystem in an active state {See COOPER, C2:L44-59, wherein this reads over "[t]he data conversion technique of the present invention advantageously enables data to be converted from one format to another while maintaining system operations"}; and
>>
>> terminating the conversion process when every directory of the first type in the filesystem has been converted to the second type.

The termination of the conversion process would be inherent to the claimed invention since it is necessary that the conversion process terminate once it reaches the last directory in the list to convert.

10.     **Claims 3-5, 9, 23, 28 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over DZIENIS, in view of COOPER, and in further view of Official Notice.

11.     **As per dependent claims 3, 4 and 23**, DZIENIS, in combination with COOPER and Official Notice, discloses:

> The method of claim 1, wherein the step of converting further includes the steps of:
>
>> retrieving an identifier of a directory in the list {See DZIENIS, [0040], wherein this reads over "scanning of the directory containing files to be converted"};
>>
>> converting the directory to a second-type directory {See COOPER, C5:L18-20, wherein this reads over "[a]fter all of the complexes receive the new code, the data records are converted from the old format to the new format and stored"}; and
>>
>> activating the second-type directory.

The Examiner takes Official Notice that It would have been obvious to one of ordinary skill in the art that at the time a directory is converted to a second-type directory, prompting the creating of a second-type directory, that the second-type directory would be activated and available for access.

12.     **As per dependent claim 5**, the Examiner takes Official Notice that it would have been obvious and widely-known to one of ordinary skill n the art to have a list represent a top-down view of the filesystem spanning from a root directory down to an outermost leaf-node.

13.     **As per dependent claims 9 and 28**, the Examiner takes Official Notice that it would have been obvious and widely-known to one of ordinary skill n the art to append a new object to the end of a directory.

14.     **As per dependent claim 34,** DZIENIS, in combination with COOPER and Official Notice, discloses:

> The apparatus of claim 26, wherein the program code is further configured to: for a particular directory already converted, convert the particular directory back to the first type {See COOPER, C5:L18-20, wherein this reads over "[a]fter all of the complexes receive the new code, the data records are converted from the old format to the new format and stored"}.

The Examiner takes Official Notice that It would have been obvious to one of ordinary skill in the art that a directory which has been converted may be reverted back to its original type using the processes of conversion again.

15.     **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over DZIENIS, in view of COOPER, and in further view of Harris et al (U.S. Patent No. 5,873,097, hereinafter referred to as HARRIS), filed on 17 December 1996, and issued on 16 February 1999.

16.     **As per dependent claim 6,** DZIENIS, in combination with COOPER and HARRIS, discloses:

> The method according to claim 5, wherein the step of converting each directory is performed for each directory in an order opposite to that of the list {See HARRIS, C7:L2-8, wherein this reads over "[t]he procedure then works the way back up the chain, performing the changes on the in-memory structure"}.

The combination of the inventions disclosed in DZIENIS, COOPER, and HARRIS would disclose a method wherein the step of converting each directory is performed for each directory in an order opposite to that of the list (i.e. the process works its way back up the chain). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to combine the

inventions suggested by DZIENIS, COOPER and HARRIS.

One of ordinary skill in the art would have been motivated to do this modification since this

reverse order would permit the detection of old-style directories that may have been introduced after the

list of old-style directories was built.

17.    **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over DZIENIS, in view of

COOPER, and in further view of Sedlar (U.S. Patent No. 6,571,231, hereinafter referred to as SEDLAR),

filed on 28 May 2002, and issued on 27 May 2003.

18.    **As per dependent claim 7**, DZIENIS, in combination with COOPER AND SEDLAR, discloses:

> The method according to claim 1, wherein the step of generating further includes the
> steps of:
>
>> a) adding a root directory as a current entry in the list {See SEDLAR, Figures 1-3; and
>> C3:L50-61, wherein this reads over "directory links table"};
>>
>> b) identifying a child directory of the current entry in the list {See SEDLAR, Figures 1-3;
>> and C3:L50-61, wherein this reads over "directory links table"};
>>
>> c) appending the identified child directory to the list {See SEDLAR, Figures 1-3; and C3:L50-
>> 61, wherein this reads over "directory links table"};
>>
>> d) repeating steps b) and c) for each child directory within the current entry {See
>> SEDLAR, Figures 1-3; and C3:L50-61, wherein this reads over "directory links table"};
>>
>> e) changing a next directory in the list immediately following the current entry to be
>> the current entry, if the next directory exists in the list {See SEDLAR, Figures 1-3; and
>> C3:L50-61, wherein this reads over "directory links table"}; and
>>
>> f) repeating steps b)-e) until no next directory exists in the list {See SEDLAR, Figures 1-3;
>> and C3:L50-61, wherein this reads over "directory links table"}.

The combination of the inventions disclosed in DZIENIS, COOPER, and SEDLAR would disclose a

method wherein directories are added to the list in order. Therefore, it would have been obvious to one

of ordinary skill in the art at the time the invention was made to combine the inventions suggested by

DZIENIS, COOPER, and SEDLAR.

One of ordinary skill in the art would have been motivated to do this modification in order to

convert directories in the list accordingly.

19.    **Claims 10-11, 18-19 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over

DZIENIS, in view of COOPER, and in further view of West et al (NPL, "Batch Processing" excerpt from

"Sams Teach Yourself Macromedia Fireworks MX in 24 Hours"), published on 4 December 2002, and

HARRIS.

20.    **As per dependent claims 10 and 30,** DZIENIS, in combination with COOPER, WEST, and

HARRIS, discloses:

> The method of claim 1, wherein the step of converting further includes the steps of:
>
>> a) creating a second-type root directory {See WEST, Figures 18.3 and 18.9; and pgs. 6-7, wherein this reads over "[f]rom the Saving Files options, choose where the batched files need to go" and "[w]hen you choose to back up your files, Fireworks will create a new directory names Original Files to differentiate them from the processed ones"};
>>
>> b) creating a second-type directory corresponding to a particular directory in the list {See WEST, Figures 18.3 and 18.9; and pgs. 6-7, wherein this reads over "[f]rom the Saving Files options, choose where the batched files need to go" and "[w]hen you choose to back up your files, Fireworks will create a new directory names Original Files to differentiate them from the processed ones"};
>>
>> c) generating a respective link in the second-type directory for each child object of the particular directory {See WEST, p. 1, wherein this reads over "export a series of image files"};
>>
>> d) activating the second-type directory {See HARRIS, C5:L19-49, wherein this reads over "renames the first temporary file to the name of the prior name of the base file, and then deletes the old file" and "writing the new version of a page, then updating the index to point to the new version rather than the older version of that page, and then deleting the old version of the page"};
>>
>> e) removing the particular directory from the list {See HARRIS, C5:L36-49, wherein this reads over "an index to the current version of the pages is maintained" and "updating the index to point to the new version"}.

The combination of the inventions disclosed in DZIENIS, COOPER, HARRIS, and WEST would

disclose a method wherein a second-type root directory and second-type directory are created

corresponding to a particular directory in the list.  Furthermore, it would have been obvious to one of

ordinary skill in the art to remove the particular directory from the conversion list once the conversion has

taken place.  Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine the inventions suggested by DZIENIS, COOPER, WEST and HARRIS.

One of ordinary skill in the art would have been motivated to do this modification so that child objects of the particular directory are generated and converted to a new type in a second-type directory. Additionally, the removal of the particular directory and deletion of the first-type directory would have been motivated for efficiency reasons in cleaning up unneeded space.

21.     **As per dependent claim 11,** DZIENIS, in combination with COOPER, WEST, and HARRIS, discloses:

> The method of claim 10, further comprising the step of:
>> creating a data structure associated with the second-type directory, the data structure including a first anchor point that is associated with a parent directory of the directory and a second anchor point associated with a parent directory of the second-type directory {See HARRIS, C5:L19-49, wherein this reads over "renames the first temporary file to the name of the prior name of the base file, and then deletes the old file" and "writing the new version of a page, then updating the index to point to the new version rather than the older version of that page, and then deleting the old version of the page"}.

The combination of the inventions disclosed in DZIENIS, COOPER, HARRIS, and WEST would disclose a method wherein the data structure associated with the second-type directory is created and includes anchor points to the parent directory and the parent directory of the second-type directory. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS, COOPER, WEST and HARRIS.

One of ordinary skill in the art would have been motivated to do this modification so the data structure may be available for access.

22.     **As per dependent claim 18,** DZIENIS, in combination with COOPER, WEST, and HARRIS, discloses:

> The method of claim 3, wherein the step of activating further includes the steps of: identifying a data structure associated with the directory; changing the data structure to be associated with the second-type directory; and removing the directory {See HARRIS, C5:L19-49, wherein this reads over "renames the first temporary file to the name of the prior name of the base file, and then deletes the old file" and "writing the new version of a page, then updating the index to point to the new version rather than the older version of that page, and then deleting the old version of the page"}.

The combination of the inventions disclosed in DZIENIS, COOPER, HARRIS, and WEST would disclose a method wherein the data structure is only associated with the second-type directory and the

original directory removed.  Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to combine the inventions suggested by DZIENIS, COOPER, WEST and

HARRIS.

One of ordinary skill in the art would have been motivated to do this modification so that

the old-style directory may be discarded.

23.     **As per dependent claim 19,** DZIENIS, in combination with COOPER, WEST, and HARRIS,

discloses:

> The method of claim 18, further comprising the step of: asserting a lock on first data
> structure while performing the step of changing {See COOPER, C5:L40-46, wherein this reads
> over "the requesting central processing complex obtains data record 1 with a lock so that other central
> processing complexes cannot access that record . . . until the lock is released"}.

The combination of the inventions disclosed in DZIENIS, COOPER, HARRIS, and WEST would

disclose a method wherein the data structure is locked during conversion.  Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions

suggested by DZIENIS, COOPER, WEST and HARRIS.

One of ordinary skill in the art would have been motivated to do this modification so that

the data structure may not be modified while in the process of conversion.

24.     **Claims 14 and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over DZIENIS, in

view of COOPER, and in further view of Kuroiwa et al (USPGPUB 2003/0217057, hereinafter referred to

as KUROIWA), filed on 7 May 2003, and published on 20 November 2003.

25.     **As per dependent claim 14 and 32,** DZIENIS, in combination with COOPER and KUROIWA,

discloses:

> The method of claim 1, further comprising the steps of:
>
> > determining a usage rate of a particular directory before converting that directory
> > {See KUROIWA, [0052], wherein this reads over "threshold value"; and [0200], wherein this reads
> > over "the contents using system may be configured so that the conversion processing is interrupted
> > when a load on the CPU making up the server exceeds a threshold level for a period of time within a
> > predetermined period nad is restarted when the load on the CPU becomes less than a threshold
> > level"}; and
> >
> > postponing converting the particular directory based on the usage rate {See KUROIWA,
> > [0052], wherein this reads over "the quality conversion of the contents or the elements . . . is

stopped or discontinued when a load on a controlling section of the server exceeds a threshold value of a first period of time"; and [0200], wherein this reads over "the contents using system may be configured so that the conversion processing is interrupted when a load on the CPU making up the server exceeds a threshold level for a period of time within a predetermined period and is restarted when the load on the CPU becomes less than a threshold level"}.

The combination of the inventions disclosed in DZIENIS, COOPER and KUROIWA would disclose a method wherein a usage rate is determined and conversion is postponed if said usage rate exceeds a certain threshold. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS, COOPER and KUROIWA.

One of ordinary skill in the art would have been motivated to do this modification so that system stability may be preserved and so that the conversion process may not adversely impact the execution of other concurrent processes.

26.     **Claims 12, 15-17, 29 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over DZIENIS, in view of COOPER, and in further view of Wang et al (U.S. Patent No. 6,728,907, hereinafter referred to as WANG), filed on 14 April 2000, and issued on 27 April 2004.

27.     **As per dependent claims 12, 29 and 31** DZIENIS, in combination with COOPER and WANG, discloses:

The method of claim 1, further comprising the steps of:

detecting a condition for pausing the converting step {See WANG, C6:L45-64, wherein this reads over "the system may detect and identify a system crash"}; and

in response to the condition, pausing the converting step {See WANG, C7:L21-35, wherein this reads over "the operating system may be able to avoid completely shutting down the computer system despite the crash, such as by terminating certain executing applications or processes that are affected by the crash"}.

The combination of the inventions disclosed in DZIENIS, COOPER and KUROIWA would disclose a method wherein a condition for pausing is detected and conversion is paused in response. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS, COOPER and WANG.

One of ordinary skill in the art would have been motivated to do this modification so that system stability may be preserved.

28.     **As per dependent claim 15,** DZIENIS, in combination with COOPER and WANG, discloses:

The method of claim 1, further comprising the steps of:

detecting a condition for stopping the converting step {See WANG, C6:L45-64, wherein this reads over "the system may detect and identify a system crash"}; and

in response to the condition, stopping the converting step {See WANG, C7:L21-35, wherein this reads over "the operating system may be able to avoid completely shutting down the computer system despite the crash, such as by terminating certain executing applications or processes that are affected by the crash"}.

The combination of the inventions disclosed in DZIENIS, COOPER and KUROIWA would disclose a method wherein a condition for pausing is detected and conversion is paused in response. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS, COOPER and WANG.

One of ordinary skill in the art would have been motivated to do this modification so that system stability may be preserved.

29.     **As per dependent claim 16,** DZIENIS, in combination with COOPER and WANG, discloses:

The method of claim 15, wherein the condition is one of:

a system crash {See WANG, C6:L45-64, wherein this reads over "the system may detect and identify a system crash"},

encountering a corrupted object within the filesystem {See WANG, C11:L48-49, wherein this reads over "[a]nother category of system errors that lead to crashes is corrupt-memory"}, and

insufficient available storage {See WANG, C9:L44-49, wherein this reads over "Out-of-memory/resources System Crashes" and "a failure of a software component, such as a device driver, to deallocate memory resources that the component non longer needs"}.

30.     **As per dependent claim 17,** DZIENIS, in combination with COOPER and WANG, discloses:

The method of claim 15, wherein the converting step is restarted upon a subsequent initial program load involving the filesystem {See COOPER, C1:L28-40, wherein this reads over "new versions of the software are loaded into the system along with change instructions providing information controlling the update"; and C7:L34-36, wherein this reads over "conversion begins for the rest of the data records to be converted. Initially, a variable N is initialized to the next record to be converted"}.

The combination of the inventions disclosed in DZIENIS, COOPER and KUROIWA would disclose a method wherein conversion is restarted upon a subsequent initial program load by the filesystem.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the inventions suggested by DZIENIS, COOPER and WANG.

One of ordinary skill in the art would have been motivated to do this modification so that

conversion may be restarted upon restart of the filesystem.

31.     **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over DZIENIS, in view of

COOPER and WANG, and in further view of Official Notice.

32.     **As per dependent claim 13,** DZIENIS, in combination with COOPER, WANG, and Official

Notice, discloses:

> The method of claim 12, wherein the condition is one of: a product install on the
> filesystem; a restore operation involving the filesystem; and a back-up operation
> involving the filesystem.

It would have been obvious to one of ordinary skill in the art that at the time the invention was

claimed to have the condition for pausing the conversion be one of a product install, a restore operation,

or a back-up operation since such processes require much of the filesystem's resources.

33.     **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over DZIENIS, in view of

COOPER, and in further view of Dubinski (NPL, "Non-recursive tree walks," by John Dubinski, hereinafter

referred to as DUBINSKI), published on 1 May 1996.

34.     **As per dependent claim 27**, DZIENIS, in view of COOPER and DUBINSKI, discloses:

> The apparatus of claim 26, wherein the program code is further configured to:
>
> > Non-recursively build a list of directories of the first type {See DUBINSKI, Para. 2, wherein
> > this reads over "[o]nce the nodes are sorted this way, a tree walk for a force calculation then reduces
> > to a scanning of this list"}.

The combination of the inventions disclosed in DZIENIS, COOPER and DUBINSKI would disclose a

method wherein the list is built non-recursively.  Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to combine the inventions suggested by

DZIENIS, COOPER and DUBINSKI.

One of ordinary skill in the art would have been motivated to do this modification so that the

overhead from recursive calls may be eliminated.

35.     **Claims 33 and 35** is rejected under 35 U.S.C. 103(a) as being unpatentable over DZIENIS, in view of COOPER, and in further view of Durand et al (U.S. Patent No. 6,338,072, hereinafter referred to as DURAND), filed on 22 July 1998, and issued on 8 January 2002.

36.     **As per dependent claim 33**, DZIENIS, in view of COOPER and DURAND, discloses:

> The apparatus of claim 32, wherein the program code is further configured to:
>
> > convert another directory, different than the particular directory, while the particular directory is being used more than the predetermined amount {See DURAND, C1:L55-64, wherein this reads over "adjusting the execution priorities of the jobs of each dimension as a function of the relative weights of the dimensions when the system is heavily loaded"}.

The combination of the inventions disclosed in DZIENIS, COOPER and DURAND would disclose a method wherein the program proceeds to convert another directory should the particular directory's exceed a predetermined amount. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS, COOPER and DURAND.

One of ordinary skill in the art would have been motivated to do this modification so that the conversion process may not be hampered by or hamper other processes concurrently accessing the particular directory.

37.     **As per dependent claim 35**, DZIENIS, in view of COOPER and DURAND, discloses:

> The apparatus of claim 26, wherein the program code is further configured to: execute at an adjustable priority level {See DURAND, C1:L55-64, wherein this reads over "adjusting the execution priorities of the jobs of each dimension as a function of the relative weights of the dimensions when the system is heavily loaded"}.

The combination of the inventions disclosed in DZIENIS, COOPER and DURAND would disclose a method wherein an adjustable priority level may be set for the program. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions suggested by DZIENIS, COOPER and DURAND.

One of ordinary skill in the art would have been motivated to do this modification so that the conversion process would have priority over other processes.

### *Response to Arguments*

38.     Applicant's arguments filed 3 July 2007, with respect to the rejection(s) of claim(s) 1-35 have

been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon

further consideration, a new ground(s) of rejection is made in view of the aforementioned cited prior art.
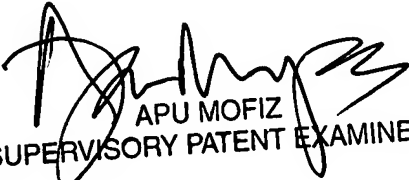
### *Conclusion*

39.     Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be

reached on M-F, 9am - 5pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu

Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at

866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or

access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

                                        Paul Kim
                                        Patent Examiner, Art Unit 2161
                                        TECH Center 2100

APU MOFIZ
SUPERVISORY PATENT EXAMINER